

## Your response

Question	Your response
<p><b>Question 1: (Section 2) Do you have any comments on our assessment of potential use cases, demand and deployment strategies for new uses of mmWave spectrum?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>Overall we warmly support Ofcom’s assessment of the potential use cases, demand and deployment strategies for these bands.</p>
<p><b>Question 2: (Section 2) Do you have any comments on our proposed overall approach to mmWave spectrum (including our aim to make the 26 GHz and 40 GHz bands available for new uses on the same or similar timeframe)?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We welcome Ofcom’s proposal and overall approach.</p>
<p><b>Question 3: (Section 3) Do you agree with our approach of specifying high and low density areas in the UK, and authorising new uses differently in those areas?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with the approach to specifying high and low density areas, but suggest that some type of appeal mechanism may be required, depending on the effectiveness of the final details in relation to the boundaries of high density areas.</p>
<p><b>Question 4: (Section 3) Do you agree with our overall authorisation approach in high density areas for the 26 GHz band (i.e. to grant Shared Access licences on a first come, first served basis for the bottom 850 MHz of the 26 GHz band, (24.25-25.1 GHz), and to auction citywide licences for the rest of the 26 GHz band (25.1-27.5 GHz))?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with this authorisation approach.</p>
<p><b>Question 5: (Section 3) Do you agree with our overall authorisation approach in low density areas for the 26 GHz band (i.e. to grant Shared Access licences on a first come, first served basis)?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with this authorisation approach.</p>
<p><b>Question 6: (Section 3) Do you agree with adopting a similar approach to authorising the 40 GHz band as our proposals for the 26 GHz band, if we were to decide to re-allocate the 40 GHz band?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with this authorisation approach.</p>

**Question 7: (Section 4) Do you agree with our proposed methodology for identifying and defining high density areas?**

*Is this response confidential? – No*

The general approach to defining towns and cities with a population of more than 75,000 is reasonable. However, we are concerned that such a definition leaves potential anomalies around the edges of towns and cities due to the way in which boundaries are defined. This may result in urban fringe areas with lower specific density being neglected by urban operators and inaccessible by rural operators. This is exacerbated by the 1km grid approach, as it is designed to protect the spectrum in the centres but encompasses rural and less dense locations, especially where there are irregular shaped boundaries. We feel that there are better methods of specifying boundaries by creating radial boundaries around density. Something akin to a heatmap with a sharp drop-off point.

Having analysed the boundaries set out by Ofcom, then overlaying premises data from OpenUPRN from Ordnance Survey, it can be seen that 664 of the 1 km<sup>2</sup> grid areas set out to be high density have less than 50 premises within them in GB (we could not obtain data for NI). Full detailed breakdown of the analysis available s required.

As a minimum, we would expect Ofcom to have an opportunity to appeal individual cases such as the removal of existing links, where they fall within such low density areas.

**Question 8: (Section 4) Do you agree with our proposed cut-off point of 40 high density areas?**

*Is this response confidential? – No*

We agree with the cut-off point at 40 high density areas.

**Question 9: (Section 5) Do you agree with our proposal to clear the fixed links in and around high density areas from the 26 GHz band?**

*Is this response confidential? – No*

We agree with this proposal to clear fixed links around high density areas.

In this context, we feel that the scope should include the top 80 high density areas. This will encourage investment and innovation to use this band far more than if it uses the same cut-off as for Question 8.

<p><b>Question 10: (Section 5, Annex 8) Do you agree with our estimates of the cost of migrating fixed links into alternative spectrum bands?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree that these estimates appear reasonable.</p>
<p><b>Question 11: (Section 6) Do you agree with the proposed approaches we have outlined to manage coexistence between new 5G users and the different existing users in the 26 GHz band? In particular, do you have any views on our proposals to limit future satellite earth stations in this band to low density areas only, and to end access to this band for PMSE users with five years’ notice?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with the overall approach.</p> <p>UKWISPA has no strong views on limiting future satellite earth stations, as we do not represent any satellite operators, but the proposal seems reasonable.</p>
<p><b>Question 12:(Section 7) Do you agree with our initial assessment on which option for enabling the 40 GHz band for new uses would best achieve our objectives?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with Ofcom’s assessment.</p>
<p><b>Question 13: (Section 7, Annex 8) Do you agree with our analysis of the impact on existing 40 GHz licensees, including our estimates of the cost of moving fixed links under the options involving revocation (options 2, 3 and 4)?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with Ofcom’s analysis and cost estimates.</p>
<p><b>Question 14: (Section 8) Do you have any comments on our high-level Shared Access proposals (including technical and non-technical licence conditions and proposed approach to setting fees)?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We do not feel that a 10m mount-height will benefit take up or service levels. It seems very unlikely that operators would deploy wide area antennas in these bands and so interference should not be a significant problem if equipment is appropriately installed at greater heights.</p> <p>10 metre constraints seem very crude, particularly as terrain can rise and fall in some areas to a far greater degree.</p>
<p><b>Question 15: (Section 8) Do you agree with the overall approach we have set out to coordination and coexistence between new Shared Access users in the 26 GHz band and existing users?</b></p>	<p><i>Is this response confidential? – No</i></p> <p>We agree with the overall approach to coexistence.</p>

<p><b>Question 16: (Section 9) Do you have any comments on our initial thinking in relation to auction design?</b></p>	<p><i>Is this response confidential? – No</i> We are comfortable with the proposal set out.</p>
<p><b>Question 17: (Section 10) Do you have any comments on the licence duration options we have considered in this section for new licences for the 26 GHz and 40 GHz bands that we would auction?</b></p>	<p><i>Is this response confidential? – No</i> We agree that these look reasonable at this time.</p>
<p><b>Question 18: (Section 11) Do you agree with our assessment of potential competition concerns and that it may be appropriate to impose a competition measure such as a 'precautionary cap'?</b></p>	<p><i>Is this response confidential? – No</i> We agree with the competition assessment concerns and precautionary cap.</p>

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